

ABSTRACT

A method for generating bump map data substantially in real time for use in a 3-dimensional computer graphics system. Data is received which defines an area to which a texture is to be applied. Texture data to apply to the area is also received. This data includes surface height data. A set of partially overlapping samples of texture data are then filtered and surface tangent vectors derived therefrom. A bump map surface normal is then derived from the tangent vectors.